

REMARKS

The enclosed is responsive to the Examiner's Final Office Action mailed on September 9, 2005.

In the current Office Action, the Examiner states that claims 1-20 are pending. However, in the previous office Action, Applicant canceled claim 7 and added claim 21. Applicant notes that in the current Office Action, the Examiner rejected claim 21 in the Detailed Action. Therefore, it is Applicant's understanding that the previous claim cancellation and claim addition were entered.

Accordingly, at the time the Examiner mailed the Final Office Action, claims 1-6, and 8-21 were pending. By way of the present response the Applicant has: amended claims 1, 9, 14, and 17; added no claims; and canceled no claims. As such, claims 1-6, and 8-21 remain pending. The Applicants respectfully request reconsideration of the present application and allowance of all claims now presented.

35 U.S.C. 102(e) Rejections

The Examiner rejected claims 1-5, 8-12 and 14-20 under 35 U.S.C. 102(e) as being anticipated by Khotimsky, et al., U.S. Patent 6,788,686 (hereinafter "*Khotimsky*"). Applicant respectfully traverses.

Independent claims 1, 9, 14 and 17 each includes at least one limitation not disclosed nor suggested in *Khotimsky*. Therefore, independent claims 1, 9, 14 and 17 are not anticipated and are patentable over *Khotimsky*.

For example, independent claim 1 recites the limitation “said assigning preventing each data packet from including consecutive data frames.” *Khotimsky* does not disclose or suggest this limitation.

Rather, *Khotimsky* is directed towards “a method to restore the original order of the packets in an end-to-end data flow after the flow has been multiplexed over a set of communication or switching paths whose available bandwidth varies significantly over time.” (*Khotimsky*, Summary of the Invention, col. 2, line 30-33).

The Examiner asserts that “*Khotimsky* discloses that an incoming data flow is partitioned into segments and then transmitted on different paths (column 1 lines 66-67).” (Office Action, dated 9/9/05, p. 8). According to the Examiner, “[t]hese partitioned segments are equivalent to the frames disclosed by the applicant.” *Id.* The Examiner further asserts that “*Khotimsky* discloses that the segments transmitted in each of the paths constitute packet blocks (column 9 lines 18-20).” *Id.* According to the Examiner, “[t]hese packet blocks are equivalent to the data packets disclosed by the applicant.” *Id.*

However, *Khotimsky* explains that: “A sequence of packets transmitted on path A without interruption by a packet transmission on path B is referred to as a packet block of path A with respect to path B.” (*Khotimsky*, col. 8, lines 47-50). Therefore, in *Khotimsky*, a packet block on a path is defined only in relation to whether transmission of packets on the path is not interrupted by transmission of packets on another path. For example, *Khotimsky* states: “Packets 107 and 108 transmitted back to back on path P1 constitute a separate block with respect to paths P0 and P2, while with respect to path P3 they share the packet block with packet 100, 102, and 104.” (*Khotimsky*, col. 9, lines 31-35, describing Figure 7).

Therefore, as is understood from Figure 7 and the discussion above, in *Khotimsky*, a packet block is defined only in relation to other packets on a different path and can include consecutive partitioned segments (e.g. packets 107 and 108).

In *Khotimsky*, to determine which packets are transmitted on which paths (e.g. packets 107 and 108 on path P1), and therefore to determine which packets constitute a packet block, *Khotimsky* explains:

“With reference now to FIG. 5, dispatch engine 50, which is fed by the flow queue, distributes the packet of the flow among the available paths according to the predetermined split weights, congestion status of the paths, and other criteria.” (*Khotimsky*, col. 7, lines 52-56, emphasis added).

As *Khotimsky* states:

“Partitioning an incoming data flow into segments of certain granularity, forwarding them along multiple paths to ensure fair load distribution and balancing between the paths, and re-assembly of the data flow at the destination are essential for achieving the goal of bandwidth aggregation.” (*Khotimsky*, col. 1, line 66 to col. 2, line 3, emphasis added).

Therefore, in *Khotimsky*, packets are distributed among paths according to criteria, e.g. predetermined split weights and congestion status of the paths, that ensure fair load distribution and balancing between the paths and achieve the goal of bandwidth aggregation.

These criteria and this goal do not prevent a packet block in *Khotimsky* from including consecutive partitioned segments, as evidenced by the packet block including packets 107 and 108 in Figure 7. In fact, *Khotimsky* suggests that having consecutive packets in a packet block is preferable in stating:

“As will become clearer, the present invention is a packet resequencing protocol operating in the environment described above that satisfies the following requirements:... relatively low control overhead...” (*Khotimsky*, col. 5, lines 2-6, emphasis added).

and

“As can be appreciated, rank-based packet enumeration and resequencing is based on two principles. First, the sequence number does not have to increase as long as the packets are transmitted along the same path, which guarantees the FIFO order of packet delivery.” (*Khotimsky*, col. 8, lines 8-11).

When consecutive segments, e.g. packets 107 and 108, are transmitted along the same path, the sequence number in the resequencing protocol does not have to be increased, thereby reducing control overhead. This is consistent with Khotimsky’s overall disclosure, which, as stated above, is directed towards “a method to restore the original order of the packets in an end-to-end data flow after the flow has been multiplexed over a set of communication or switching paths whose available bandwidth varies significantly over time.” (*Khotimsky*, Summary of the Invention, col. 2, line 30-33).

Khotimsky is not directed towards distributing impact that a loss of any particular packet block (or the data packet of claim 1) has on the quality of the recovered data. Therefore, Khotimsky does not disclose or suggest preventing, or having a reason for preventing, each packet block (or the data packet of claim 1) from including consecutive segments.

Therefore, Khotimsky does not disclose or suggest the limitation of “said assigning preventing each data packet from including consecutive data frames.”

Independent claims 9, 14 and 17 each include similar limitations. Specifically, independent claim 9 includes the limitation “said distributing preventing each data packet from including consecutive data frames.” Independent claims 14 and 17 each

includes the limitation “preventing each data packet from including consecutive data frames.”

Therefore, *Khotimsky* also does not anticipate independent claims 1, 9, 14 and 17. Claims 2-5, 8, 10-12, 15-16 and 18-21 each depend, directly or indirectly, from one of the foregoing independent claims. Therefore, *Khotimsky* fails to anticipate claims 2-5, 8, 10-12, 15-16 and 18-21 for at least the reasons discussed above with respect to claims 1, 9, 14 and 17. Withdrawal of the rejection is respectfully requested.

35 U.S.C. 103(a) Rejections

The Examiner rejected claims 6, 13, and 21 under 35 U.S.C. 103(a) as being unpatentable over *Khotimsky*. Examiner asserts that the additional limitations of claims 6, 13, and 21 would have been obvious to one having skill in the art at the time the invention was made.

Claims 6, 13, and 21 depend from one of the foregoing independent claims. In view of the above remarks, a specific discussion of these dependent claims is considered to be unnecessary. Therefore, Applicant's silence regarding any dependent claim is not to be interpreted as agreement with, or acquiescence to, the rejection of such claim or as waiving any argument regarding that claim.

Accordingly, Applicants respectfully request withdrawal of the rejection of dependent claims under 35 U.S.C. 103(a) and respectfully submit that the dependent claims are also in condition for allowance.

Request for Refund of Overpayment

Applicant notes that Applicant mistakenly paid an additional fifty dollars (\$50) for an additional claim in the previous response. However, since claim 7 was canceled in the previous response, the additional fifty dollars (\$50) was not due. Applicant would be grateful for a refund of that amount to our Deposit Account Number 02-2666.

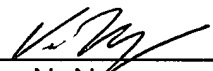
CONCLUSION

Applicant respectfully submits that all rejections have been overcome and respectfully requests the allowance of all pending claims.

If there are any additional charges, please charge them to our Deposit Account Number 02-2666. If a telephone conference would facilitate the prosecution of this application, the Examiner is invited to contact Thomas C. Webster at (408) 720-8300.

Respectfully Submitted,
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Date: 11/9, 2005



Van N. Nguy
Reg. No.:55,851

12400 Wilshire Boulevard
Seventh Floor
Los Angeles, CA 90025-1026
(408) 720-8300